MONTHLY REPORT

[redacted]

25X1

PAR 216

2 Oct 64

SUBJECT: Exposure of Photographic Material with Lasers

TASK/PROBLEM

1. Determine the manner and degree of the interaction of present and predictable future photographic films with coherent radiation from laser sources in red and near IR spectrum ranges.

DISCUSSION

2. During this period, the gas laser projection system was assembled and mounted on a heavy duty 3- x 4-foot surface plate. Optical elements of the system are contained in aluminum blocks and can be accurately positioned in hardwood Vee troughs which are bolted to the surface plate. Both the laser source and film holder are attached directly to the surface plate.

3. The condenser optics for the system consist of two microscope objectives, one a 16mm and the other a 48mm. The projection optics consist of two collimator lenses, one with a 300mm focal length and the other with a 1016mm focal length.

PLANNED ACTIVITY

4. Next period the photo examples shown in Quarterly Report No. 1 for FY-65 (8 Sept 1964) on the new diffraction limited projection system will be duplicated.